Aftermath

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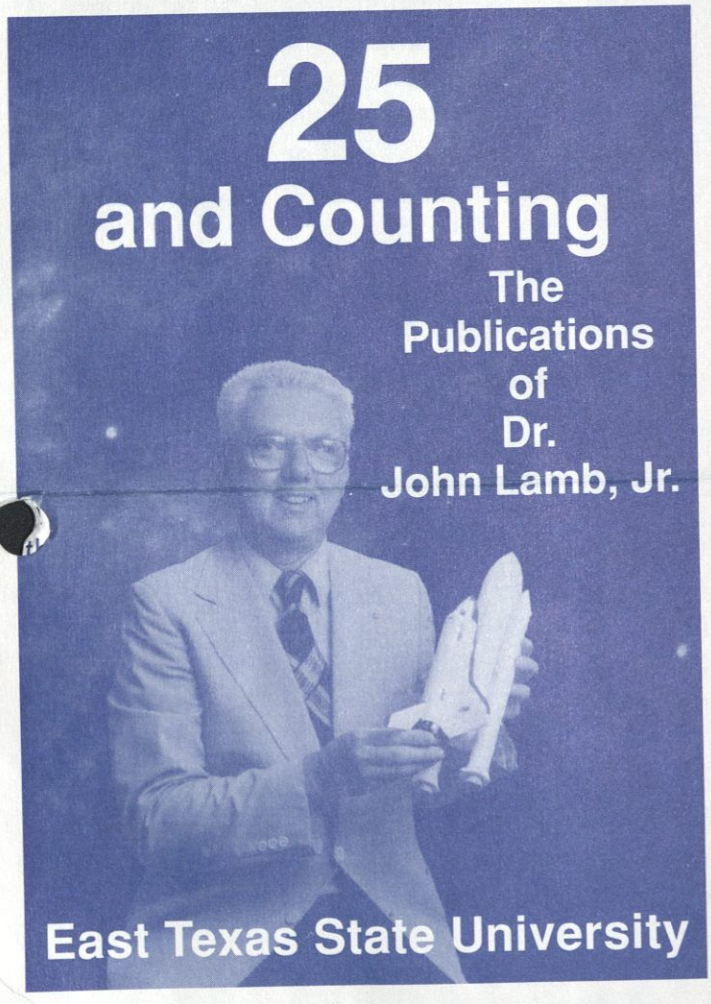
Book of Publications

by John Lamb, Jr.

Now Available



Dr. John Lamb, Jr. has compiled all his publications into one volume entitled "25 and Counting." He has published more than 25 articles during the more than 25 years he has been teaching at ETSU.

The book is dedicated to the memory of William Weldon "Bub" Taylor and contains stories he used to tell, puzzles he liked to solve, etc. The proceeds will be donated to the Bub Taylor Scholarship Fund. Alumni may order copies of the book using a form located elsewhere in this newsletter.

Four E.T.S.U. Math Professors Considering Retirement

There are four mathematics faculty members considering retirement in the next 6 to 18 months. They find that preparing for class isn't as easy as it used to be. They also find that it is more difficult to learn the names of their students. Some of you will not be happy to learn that your name is a little hard to "pull out" far too often.

Indeed time has passed too quickly, but that is supposed to happen when you are having fun. We do appreciate the work you did for us while you were here. We have always enjoyed teaching our majors and minors in mathematics. We enjoyed your provocative questions and yes, we enjoyed those that were not so provocative. Both must occur for learning to take place.

The four individuals considering retirement (listed in the order of projected retirement) are Dale Bedgood, Archie Brock, John Lamb, Jr. and Howard Lambert. Presently all four plan to remain in Commerce.

Faculty Health Report

Howard Lambert and Dale Bedgood are presently enjoying good health, with no recent problems. Stuart Anderson is back at work full time and seems to be doing fine. Dennis Grantham is also working full time, teaching and serving as acting head of the computer science department. His latest tests were encouraging and we hope this will hold for a long time in the future.

PIZZA + ASPIRIN + $ = MAW!

Mathematics Awareness Week for 1994 was celebrated at ETSU on April 24-30 and featured the theme Mathematics and Medicine. In an effort to raise awareness about and improve attitudes toward mathematics (and to have some fun!) the ETSU Mathematics Department sponsored a math video film-fest, a raffle and a problem solving competition open to the entire ETSU community. The prizes were donated by very generous local businesses. The raffle was designed for the general public. Rather than purchase a ticket, a participant had to correctly solve a problem. The problem solving competition was designed to stimulate mathematically inclined ETSU students and faculty. Prizes were awarded for the best answers in the categories: undergraduate student, graduate student, faculty and staff. One of the mathematics showcases featured brief articles from the MAA and AMS illustrating connections between mathematics and medicine.

ExCET Test Preparation Course Update

We have now completed two semesters of offering a class which better prepares the student for the ExCET test, the test that all secondary teachers of mathematics must pass before being certified. The class is a one-semester hour credit class, offered during the first 6 weeks of the spring semester. Our success rate has been rather good with only one student being unsuccessful on the first try out of approximately 16 students taking the test.

Texas Instruments was instrumental in this program in that they provided our department with fifteen TI 81 graphing calculators for students to use. The Texas Education Agency provides the student with one of these calculators to use during the test, so familiarity with the TI 81 is very helpful.

E.T.S.U. Students Participate in Putnam Competition

On Saturday, December 4, 1993, six ETSU students participated in the 54th annual Putnam exam. This six-hour-long test has only 12 problems, yet students who get two correct place in the upper half of the country. More than a third of the participants nationally received a score of zero. This was the second year in a row that ETSU fielded a team of three, this year's members being Dale Henderson, Casey Qualls and Jeff Yeager. The team score almost doubled last years' score. Here is a sample question from the 1993 exam: If x and y are chosen at random from (0,1), all values equally likely, what is the probablility that x/y is closer to an even integer, as opposed to an odd integer?

MATH CLUB ACTIVITIES

The Mathematics Clubs' officers during the 1993-94 school year were Kelly Steffee, Pi Mu Epsilon President; Eric Aurand, Pi Mu Epsilon Vice-President; Kenneth Grantham, MAA President; Elizabeth Razniak, MAA Vice-President; Darin Divinia, Alpha Gamma Alpha President; and Yvonne Hurley, Treasurer of all three clubs.

The fall picnic, the regular meetings, the Christmas Party, and the Spring Banquet all went very well under the capable leadership of those listed above.

COLLOQUIUM PRESENTED

1993-1994 saw the introduction of a Student/Faculty Colloquium, consisting of free food and lectures on mathematics or mathematically-related topics, designed for upper-level undergrads, grad students and faculty. There were 3 colloquia last fall and 7 this past spring, including 3 speakers from outside ETSU. The talks were roughly every other week, on Wednesdays at 2:00 p.m.

Sue Smith Wins Award

Mathematics Department secretary, Sue Smith, was honored with a Professional Achievement award by the ETSU Faculty Senate for her outstanding contributions to the university community.

Eighth Annual Homecoming Alumni Breakfast Scheduled

The eighth annual Homecoming Mathematics Alumni Breakfast will be held at 9:00 a.m., Saturday, October 22, 1994 in the Blue-bonnet-Pecan-Friendship rooms in the Sam Rayburn Memorial Student Center. Several scholarships will be awarded and alumni recognized. Dr. John Lamb, Jr. will be there with his new book "25 and Counting" which he will be happy to autograph for you. Please send your breakfast reservations in by October 14, 1994. If you cannot attend but would like to order copies of the book, please use the form below. In any event, please take the time to fill out and return the form so we can accurately update our alumni files.

Math Department Sports Activities

Our intramural basketball team grew large enough to split during the Spring of 1994. The team retaining the "Irrational" moniker consisted of mostly math people, with the exception of Fred Russell from the registrar's office, a good long-range shooter. Eric Aurand, math grad assistant, and Ken Grantham, a senior, were valuable contributors to the team effort. Others on the team were John Heath and Rick Kreminski, faculty members; Michael Martin and Ronnie Layton, grad assistants; and Stephens Johnson and Jay Petty, students. We had a pretty good year, losing in the finals of the Class B division. The other team, the "Primes", couldn't seem to get rolling after losing to the "Irrationals" in the first game 39-37 in overtime.

The Irrational softball team also had a fun year, winning the "Class B" division after playing in the Class A group during the season. Heidi Staebler was a nice addition to our team and handled most of the pitching chores.

Alumni Breakfast Reservation and "25 and Counting" Book Order Form

Name: _____

Address: _____

City, State & Zip: _____

Phone: ( ) _____

Please Reserve _____ places at the Homecoming Alumni Breakfast @ $6.00 each.

Enclosed: $ _____

Please send copies of "25 and Counting" at $14.95 plus $1.23 sales tax plus $2.13 for first class postage or $.05 for book rate postage to me at the above address.

Enclosed: $ _____

Total Enclosed: $ _____

Please send us your news for the Alumni News Column on a separate page.

Faculty Activities
Publications

Dr. Stuart Anderson published an article entitled "A Generalized Chaos Game" in the Winter 1994 issue of *Mathematics and Computer Education.*

Drs. John Lamb, Jr., Ron Huffstutler, Archie Brock and Bill Aslan published an article entitled "A Statistical Analysis of the Texas LOTTO Lottery" in the January, 1994 issue of the *Texas Mathematics Teacher.*

Ms. Connie Yarema published an article entitled "A General Education College Algebra Class" in the January, 1994 issue of *UME Trends.*

She and **Sandra Johnson** published an article entitled "A Modification of the Key Number Method of Factoring" in the January issue of the *Texas Mathematics Teacher.*

Meetings Attended

The annual meeting of the Texas Section of the MAA in April, 1994 at Texas A&M University was attended by **Stuart Anderson, Bill Aslan, Dale Bedgood, John Davenport, John L. Heath, Charlie Jones, Rick Kreminski, John Lamb, Jr., Howard Lambert, Heidi Staebler, Vance Underhill and Connie Yarema.**

A mathematics and technology workshop entitled "Sharing New Perspectives in Education" at Cooke County College was attended by **Dale Bedgood, John Davenport, Charlie Jones and Heidi Staebler** in November, 1993.

Ms. Heidi Staebler and Mr. Charlie Jones also attended a similar workshop at Northeast Louisiana University in September, 1993.

Dr. Rick Kreminski attended an AMS meeting at Texas A&M in October, 1993 and one at Kansas State in April, 1994. He also attended a meeting entitled "Texas Topology & Geometry" at UT Austin in April, 1994 and a STATS Workshop at Rice University in June, 1994.

Ms. Heidi Staebler attended the fifth annual *Conference on Technology* focusing on the graphing and symbolic calculators at Hotel Sofitel in Houston, TX in July, 1994 where she ran a one-hour workshop entitled "Stepping Toward Reformed Calculus While Using a Traditional Text: Ideas, Efforts and Lessons Learned."

Connie Yarema attended meetings entitled "Mathematicians in Education Reform" in Troy, NY in November, 1993; "TI-85 Workshop" at Northeast LA University in October, 1993; "Technology Teachers Training Workshop" in Ft. Worth, TX in February, 1994 and "Professors Rethinking Options in Mathematics for Prospective Teachers" in Aicata, CA in August, 1994. She also attended the National MAA/AMS meeting in Cincinnati, OH in January, 1994.

Papers Presented

Dr. Bill Aslan presented a paper entitled "Mathematics Teacher Education: The Role of Colleges and Universities for America 2000" at the Annual meeting of the Texas Section of the MAA at Texas A&M on April 8, 1994.

Dr. Rick Kreminski presented a paper at the same meeting entitled "(Boolean) Algebra Topology."

Dr. John Lamb, Jr. presented a paper at the same meeting entitled "A Statistical Analysis of the Texas LOTTO Lottery."

Ms. Heidi Staebler presented a paper at the same meeting entitled "Calculus Reform: Ideas, Efforts and Lessons Learned."

Ms. Connie Yarema presented a paper at the same meeting entitled "Higher Order Thinking and its Assessment in the Mathematics Classroom." She also presented a paper entitled "Critical Thinking Approach to Mathematics and Teacher Education" at the PROMPT Workshop in August, 1994.

She and **Elizabeth Razniak** presented a paper entitled "Critical Thinking Approach to Mathematics" at Texas A&M's Alliance for Minority Participation in June, 1994.

Other Activities

Dr. Stuart Anderson is president-elect of the Texas Section of the MAA for 1994-95.

Dr. Bill Aslan served as president of the ETSU chapter of TACT in 1993-94. He received an outstanding service award from them for his efforts.

Dr. Dennis Grantham was appointed acting head of the computer science department in the Fall of 1993 and will serve in that capacity until January, 1995. He also teaches two courses in the mathematics department.

Dr. John Lamb, Jr. organized and presented a program on July 20, 1994 to commemorate the 25th anniversary of the first manned moon landing, the 18th anniversary of the Viking robot landing on Mars and the Jupiter-Comet Shoemaker-Levi 9 collision in progress at the time.

Dr. John Lamb, Jr. is now serving the third year of his three-year term as Level II Director of the Texas Section of the MAA.

Ms. Heidi Staebler attended a Chautauqua short course entitled Calculus: A Fresh Approach" at Christian Brothers University in June, 1994.

Connie Yarema and **Jean Jones** co-authored a grant and team-presented a workshop for the Sulphur Springs and Como-Pickton 5th through 12th grade teachers.

Dr. Vance Underhill received his 25-year pin in May, 1994.

Department Head's Column

It is good to address our alumni again, and to acknowledge their support and encouragement to us. We can never properly stress your importance to the work we do and our sincere desire to keep you informed through this newsletter.

In these pages we want to include recent news about our students, faculty and alumni. Earlier this year I received the following letter which testifies to the fine efforts of all three groups. I will include it here to rescue me from direct boasting:

May 10, 1994

Dr. Stuart Anderson,

The math department at C.H.S. has been so fortunate to have had Wayne Hester, Jennifer Reamey, Tammy Scott, Bill Spataro and Ken Grantham as student teachers this year. I have worked with and observed these student teachers for an entire semester. Commerce High School did a better job teaching math because we had these young men and women in our classrooms.

Each one of them is an excellent mathematician. They have worked hard in lesson preparation. Each one has been nothing but professional in their conduct.

After working with these five young people, I can breathe a sigh of relief when I think of future math teachers. The teaching profession has moved up a notch because of these five ETSU graduates. I only hope we can have five more just like them next year!

Thanks,

Barbara Stone,
Teacher

The five students mentioned in the letter, as well as many other capable ones, have recently joined the ranks of our department's alumni. We take pride in them and we hope you all continue to take pride in us.

Update On Fermat's Last Theorem Proof

Is it or isn't it? Last years' newsletter announced that Andrew Wiles of Princeton had proved a result which finally settled Fermat's Last Theorem, just as Fermat claimed over 350 years ago: that is, that there are NO positive integer solutions to $x^n + y^n = z^n$ when n is greater than 2.

Wiles himself admits more work, apparently in Iwasawa theory, needs to be done before his proof will be complete. The main (only?) stumbling block is in verifying a variant of a conjecture by Mazur. Wiles needs to bound the size of certain Selmer groups, which are subgroups of group-cohomology groups involving the Galois group Gal(Qbar/Q), where by Qbar we mean the algebraic closure of the rational numbers Q, i.e. the algebraic numbers.

In spite of early speculation, Wiles did not receive the Fields Medal at the recent International Congress of Mathematicians in Switzerland, and due to his age would no longer be eligible.

Alumni News

Stephanie Tyler (B.S. '88) has completed her Ph. D. degree from the University of Texas in Austin. She is now an Assistant Professor of Mathematics at the University of Tennessee, Martin.

James T. Conlan (B.S. '62) was named president of Astro Aerospace Corporation located in Santa Barbara by the Board of Directors. He is a recognized leader in the field of robotically controlled deployable structures for space application.

Jimmy Don Stuth (B.S. '56) is now a manager at E-Systems in the aeronautical Projects Department overseeing proposal and estimating activities for the Aeronautical Systems Engineering Organization.

Jon Allen Yeakley (B.S.'86) published an article entitled "Organizational Levels Analysis: A Key to Understanding Processes in Natural Systems" in the *Journal of Theoretical Biology*. After completing a doctorate in Environmental Science at the University of Virginia, he hopes to take a post-doctoral position with the U.S. Geological Survey.

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